

Missoula
Concrete
Construction

www.missoulaconcrete.com

Phone (406) 549-9682

FAX (406) 549-6404

P.O. Box 16086

Missoula, MT 59808-6086



Picnic Shelter

Spring Meadow Lake State Park

MT. FWP

Missoula Concrete Const.
Shop Drawings

Drawn By:
Steve McShane

02-28-08

NOTES

1) MIX DESIGN 7.25R

Concrete Aggregate to be state specification material supplied by JTL Group

--One CY

Cement	650 lbs (Holcim Type III)
Water	258 lbs. (31 gal.)
Coarse Agg ¾ Minus	1,950 lbs SSD
Sand	1,100 lbs SSD
MB Glenium 30 /30	66 oz.
MBAE 10 air ent.	6 oz. (4-6%)

.40 Cement / Water Ratio (Max.)
Slump = 2.5-4"

Stripping Strength: 2,500 psi
Final Strength: 4,000 psi

- 2) ALL REBAR IS GRADE 60 (ASTM A615)
- 3) REINFORCING WILL BE FASTENED WITH STANDARD WIRE TIES.
- 4) BARNWOOD TEXTURE - WALLS
- 5) SHAKE TEXTURE - ROOF
- 6) SHELTER IS DESIGNED TO ACCOMMODATE A ROOF SNOW LOAD OF 60 P.S.F.

Designed for Spring Meadow Lake
State Park

GENERAL NOTES

Unless specified otherwise, the following general notes shall apply to all the precast erection drawings.

GENERAL:

It is the responsibility of the General contractor to provide any Field Measurements required on drawings.

It is the responsibility of the General contractor to coordinate Precast Shop drawings with all other trades. (Structural Foundation, Electrical, Steel)

Architect/Engineer approval indicates acceptance of the dimensions shown herein, exposed finishes, and conformance with aesthetic requirements imposed by the precast panels and connections.

Unless otherwise noted on the approved drawings, General Contractor approval indicates all building conditions (column centerlines, floor elevations, foundation walls and grade beams, and dimensions) are in accordance with the Contract Documents.

TOLERANCES:

Precast products will be fabricated to tolerances specified in section 5 of P.C.I. MNL-117 "Manual for Quality Control for Plants and Production of Precast Concrete Products."

BOWING & MOVEMENT:

This Prestressed structure is designed to move. Bowing due to temperature differential should be expected.

JOINTS:

All joints between precast members or between precast members and work by others are to be considered nominal dimensions only. Due to production, erection and general construction tolerance, these dimensions can vary.

OPENINGS:

Missoula Concrete Construction shall provide only those openings shown on their shop drawings. No opening shall be cut or drilled without MCC approval in writing.

CONCRETE:

It is the responsibility of the General Contractor to coordinate Precast Embed drawings with the Structural Foundation drawings.

ERECTION:

All field welding shall be E70XX.

All connections shall be completed as soon as possible following the precast member erection.

Construction stability of the precast structure during the erection is the responsibility of the precast erector.

Erector shall survey the site before erection and constantly examine the plumb and alignment of the precast member.

ERECTION STEEL:

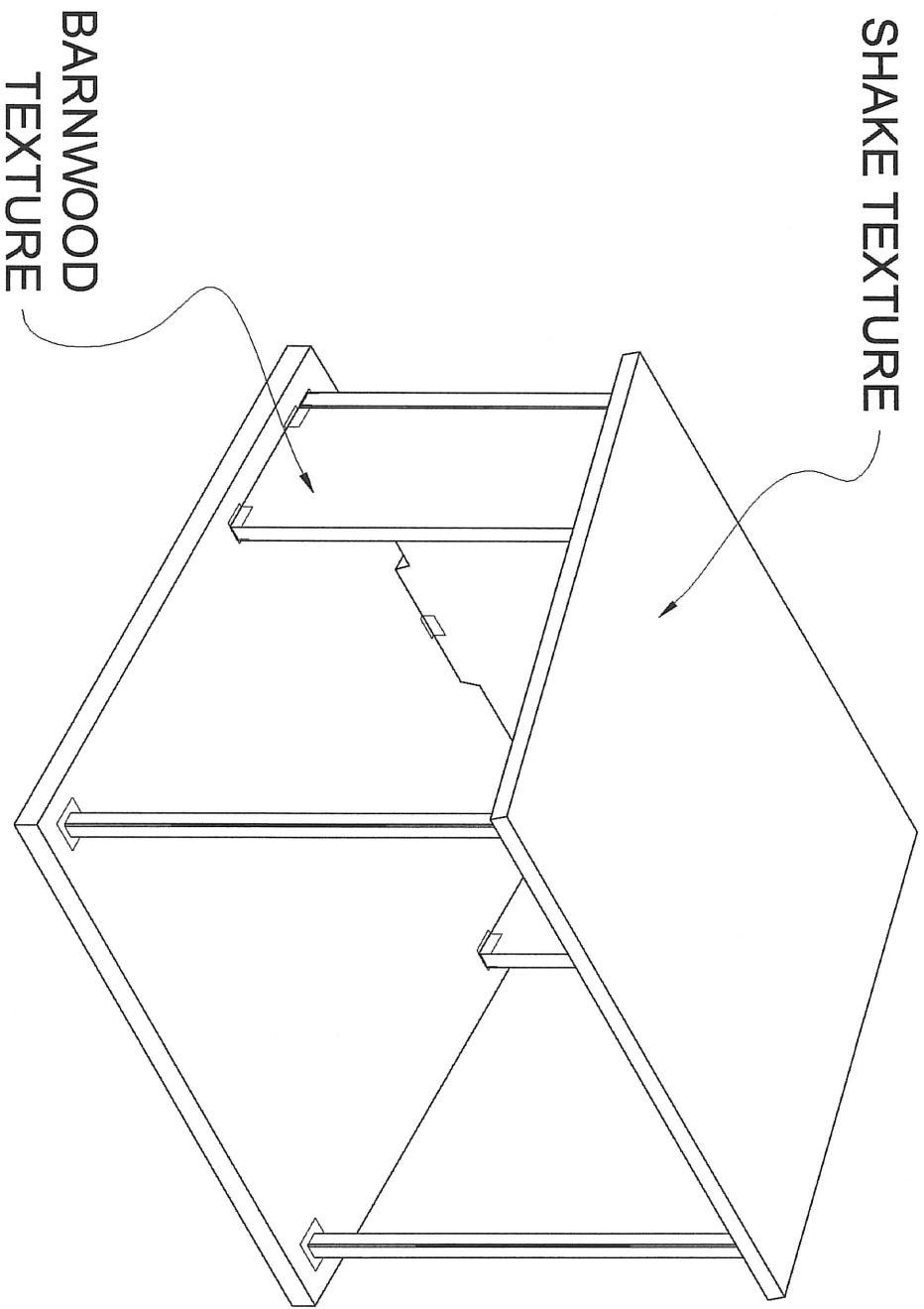
Material supplied shall be as specified below unless otherwise noted in connection details and design.




- Hot rolled steel: A36
- Bolts: Grade 5
- Threaded rods: Grade 2
- Rebar: Grade 60
- Coil rods: High Tensile

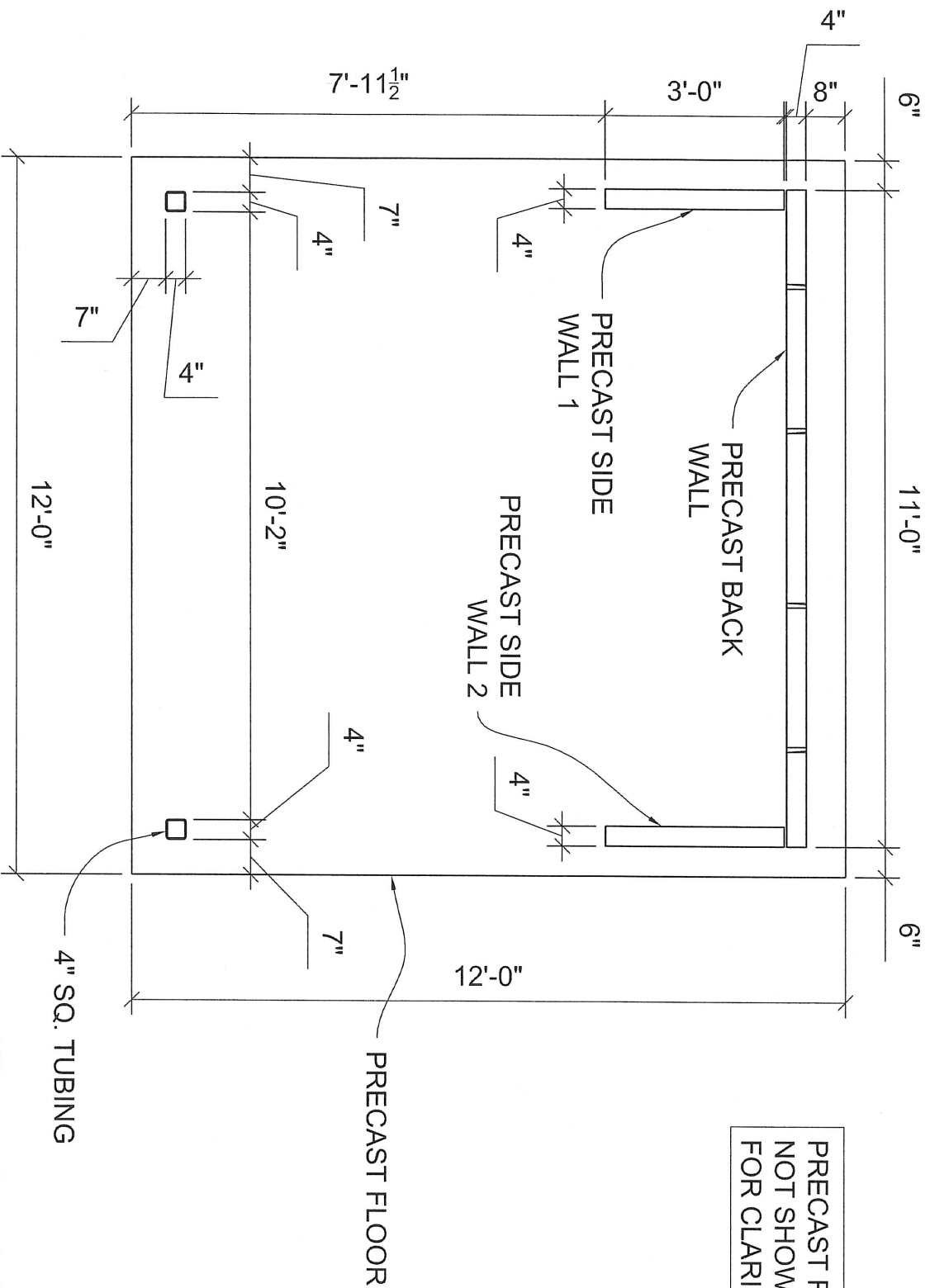
FIELD DRILLED ANCHORS:

No field drilled anchors shall be applied to any precast member without MCC written approval.

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P.O. Box 16086 - Missoula, MT 59806-6086			
Project:	Picnic Shelter	Date:	2-28-08
Contractor:	MT, FWP	Reviewed:	
Drawing:			
Specification Sheet			
Drawn By:	Steve P McShane	Checked By:	
Scale:	No Scale	Released for Fabrication:	
		Sheet:	1
		Of:	11



Missoula Concrete Construction		www.missoulaconcrete.com	
Project: Picnic Shelter		Date: 2-28-08	
Owner: MT. FWP		Revised: 	
Drawing: 			
Iso View		Sheet: 2	
Drawn By: Steve P McShane		Checked By:	
Scale: No Scale		Released for Fabrication:	

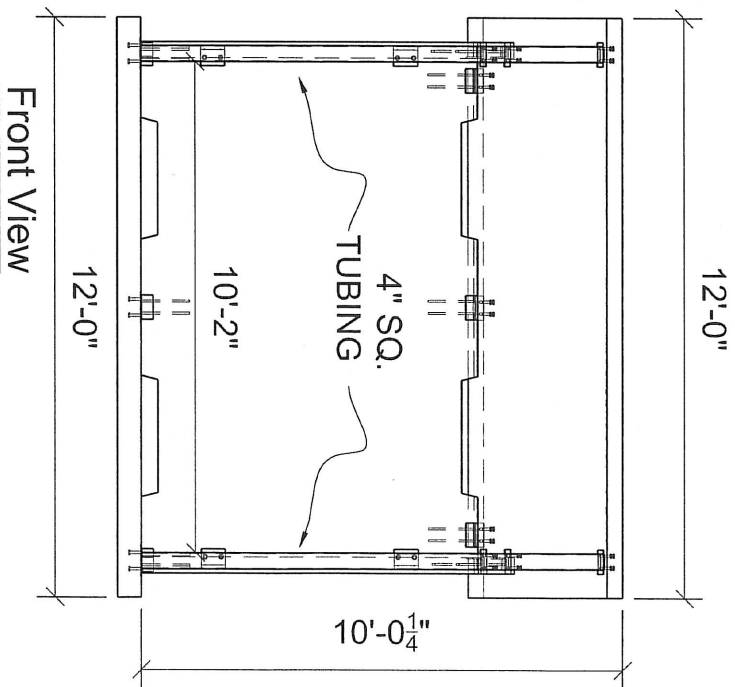
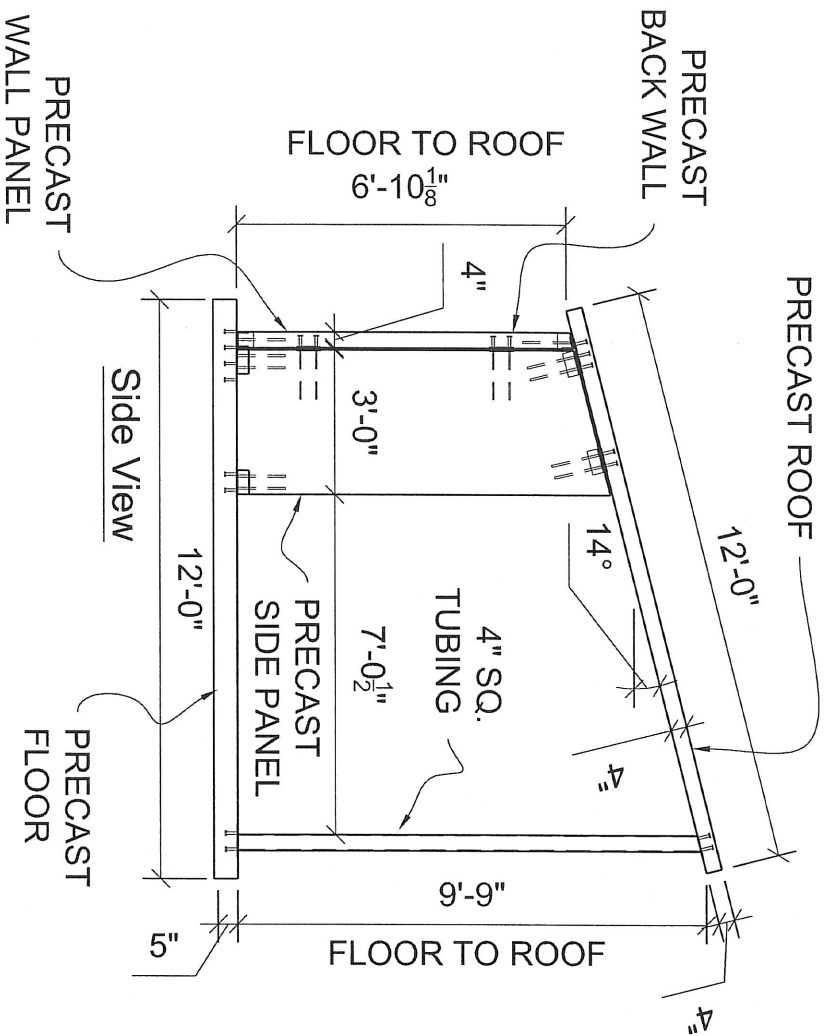


PRECAST ROOF
NOT SHOWN
FOR CLARITY

Plan View

SCALE: 1/4"=1'

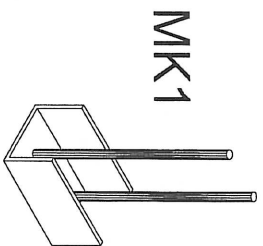
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Project:	Picnic Shelter
Contractor:	MT. FWP
Drawing:	
Drawn By:	Steve P. McShane
Scale:	Released for Fabrication:
Plan View	Checked By:
Sheet:	3
Of:	11
Date:	2-28-08
Revised:	



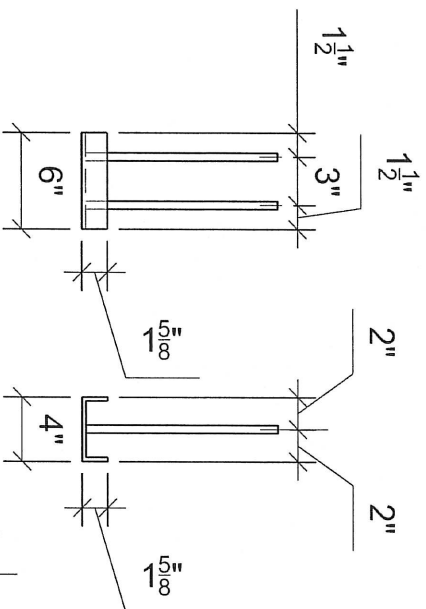
Front and Side View

SCALE: 1/4"=1'

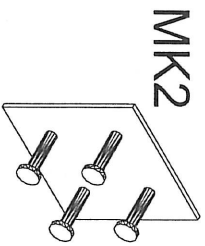
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Drawing: Front / Side View Drawn By: Steve P McShane Scale:		Checked By: Released for Fabrication Sheet: 4 Or 11	



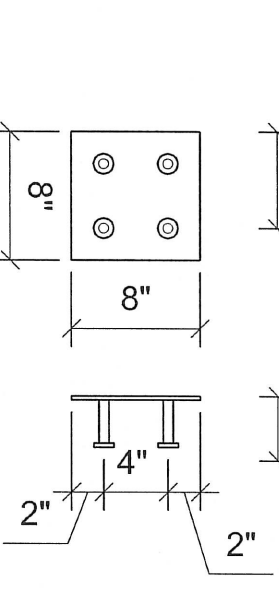
MK1



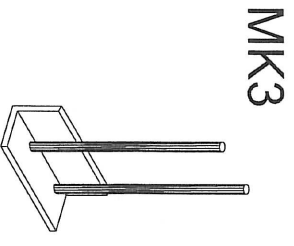
C4x6"
W/(2) #4 BAR x 12" (7)



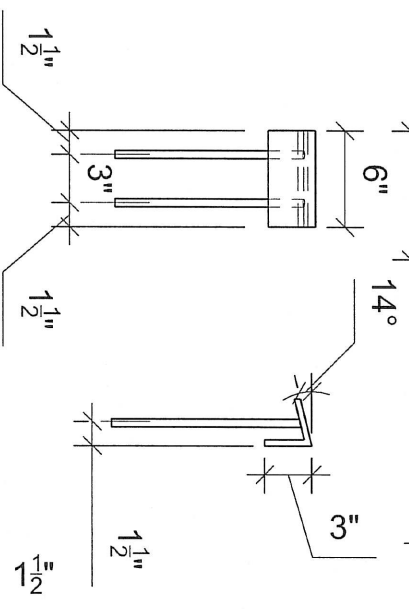
MK2



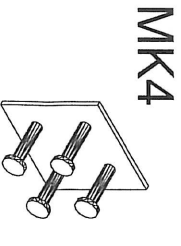
E 3/8" x 8" x 0'-8"
W/(4) 1/2" Ø x 3" HAS (4)



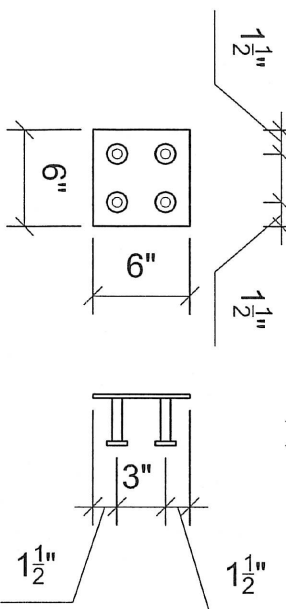
MK3



L 3" x 3" x 3/8" x 0'-6"
W/(2) #4 BAR x 12" (3)



MK4

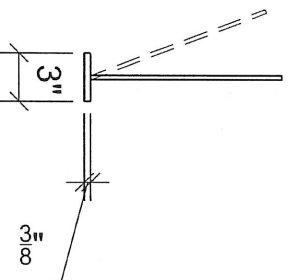
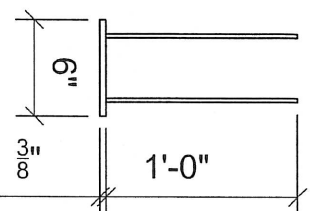
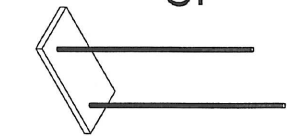


E 3/8" x 6" x 0'-6"
W/(4) 1/2" Ø x 3" HAS (14)

SCALE: 1"=1'-0"

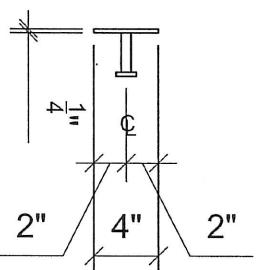
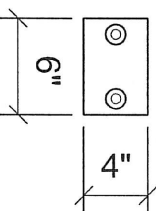
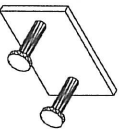
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Contractor: MT, FWP		P. O. Box 16086 - Missoula, MT 59808-6086	
Drawings:		Date: 2-28-08	
Embed Page		Revised:	
Drawn By: Steve P McShane		Sheet: 5	
Scale:		Released for Fabrication	
		Of: 11	

MK5



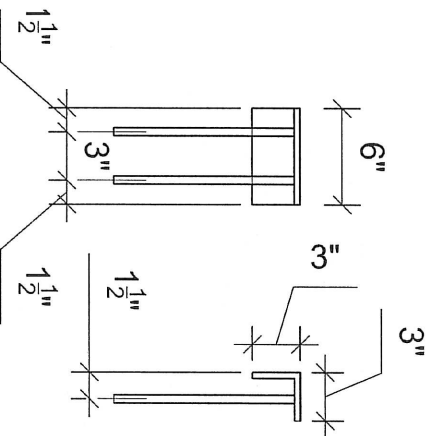
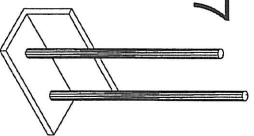
(4)
 $R \frac{1}{4}" \times 3" \times 6"$
 $W/(2) \frac{1}{2}" \emptyset \times 12"$ DBA'S @4" GA
 (BEND DBA'S 18.4° FOR 12
 EMBEDS)

MK6



(4)
 $R \frac{1}{4}" \times 4" \times 6"$
 $W/(2) \frac{1}{2}" \emptyset \times 3"$ HAS @4" GA

MK7



(4)
 $L 3" \times 3" \times \frac{3}{8}" \times 0'-6"$
 $W/(2) \#4$ BAR x 12"

MK8

HSS 4" x 4" x $\frac{1}{4}"$ x 9'-6"
 CUT AT A 14° ANGLE (2)

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Project: Picnic Shelter		Date: 2-28-08	
Contractor: MT. FWP		Revised: A	
Drawing: Embed Page 2		Sheet: A	
Drawn By: Steve P McShane		Checked By: A	
Scale: Released for Fabrication		Of: 6	
		11	

SCALE: 1"=1'-0"

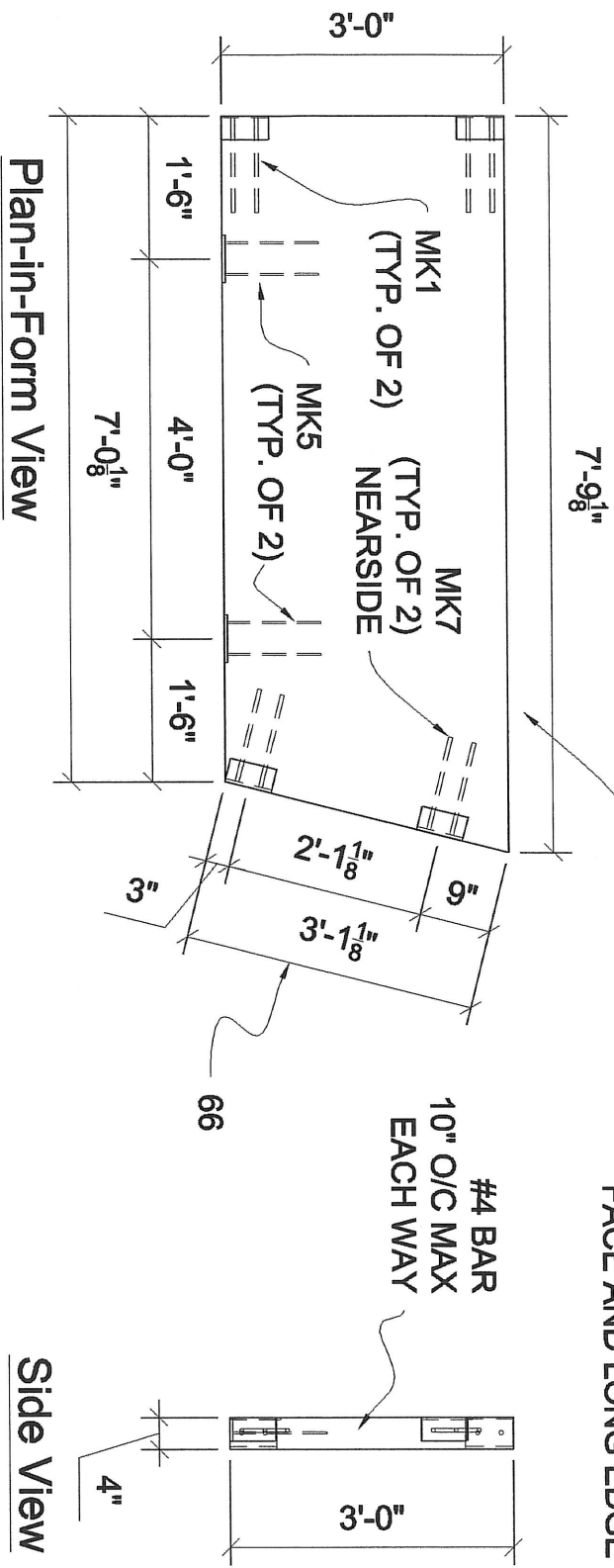


Precast Back Wall

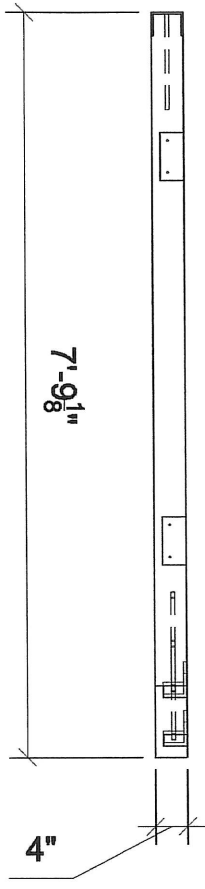
SCALE: $\frac{1}{2}"=1'-0"$

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Contractor: MT. FWP	Revised: A		
Drawing: A	A		
Precast Back Wall			
Drawn By: Steve P McShane	Checked By:		
Scale:	Released for Fabrication:		
	Qt: 11		

BARNWOOD TEXTURE
FACE AND LONG EDGE



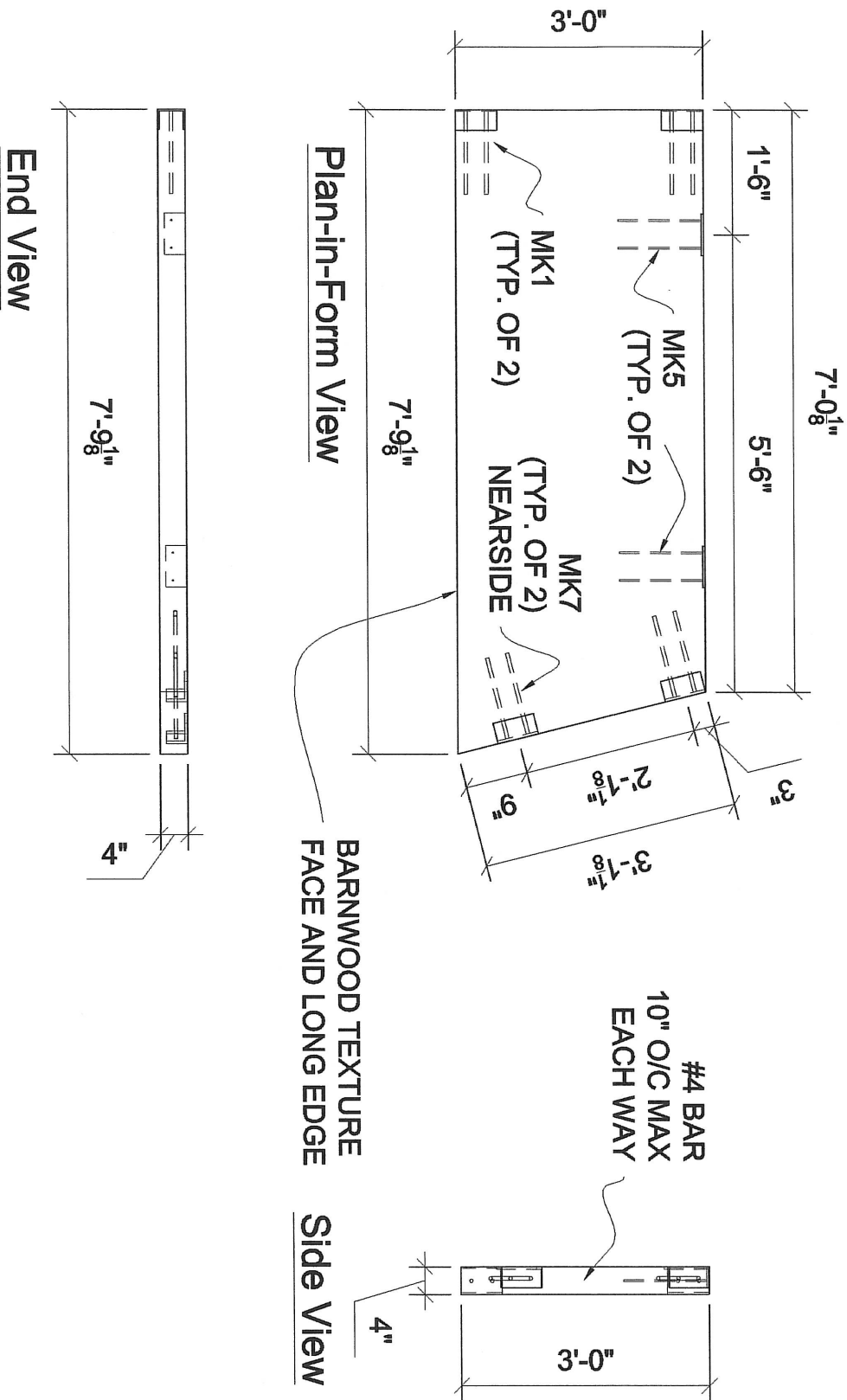
End View



Precast Side Wall 1

SCALE: 1/2"=1'-0"

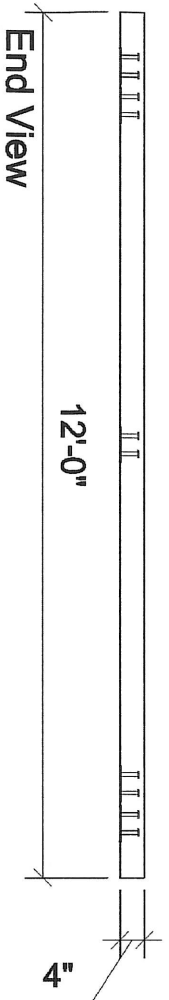
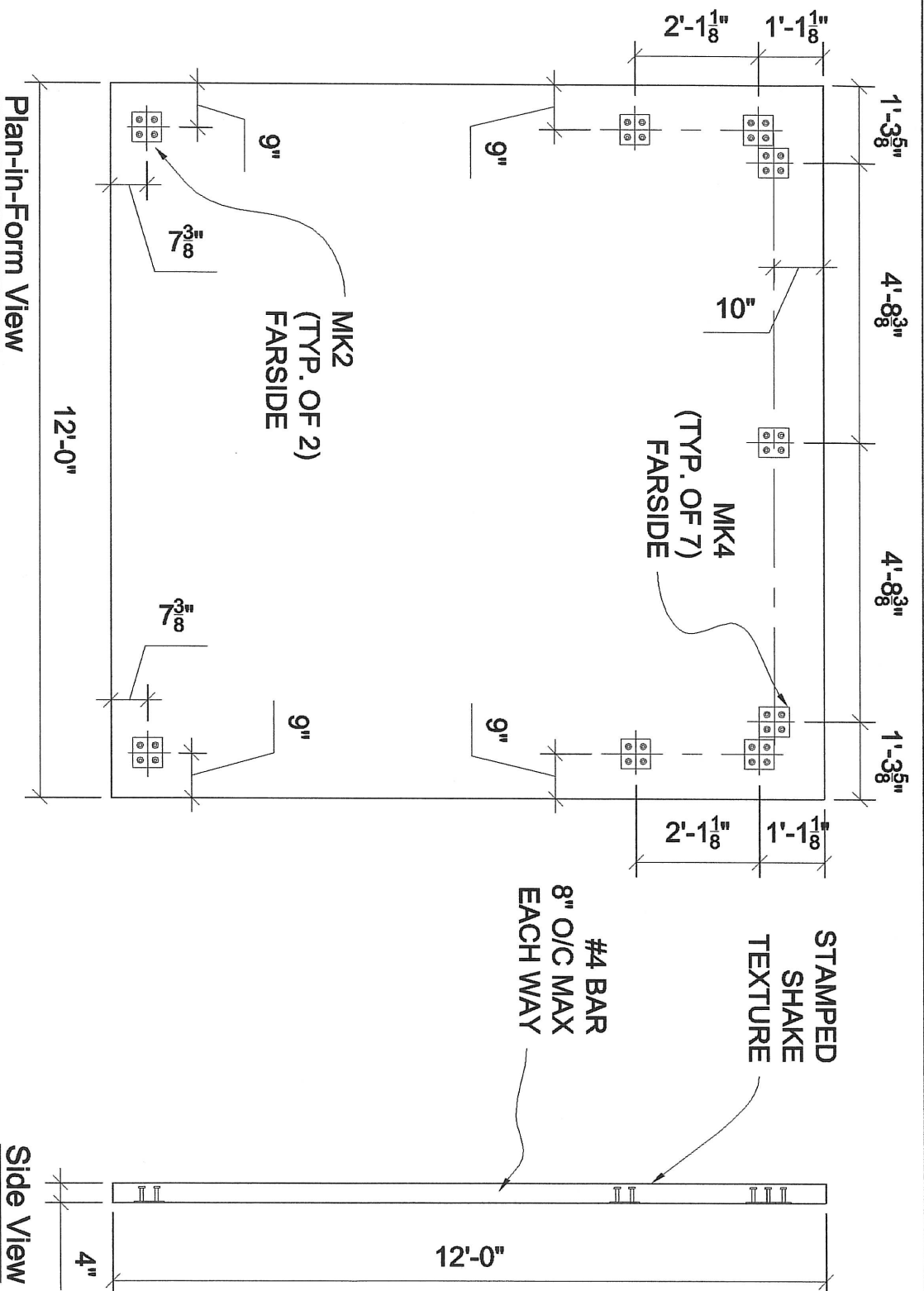
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Project: Picnic Shelter	Date: 2-28-08
Contractor: W.J. FWP	Revised: A
Drawing: Precast Side Wall 1	
Drawn By: Steve P McShane	Checked By: A
Scale: 1/2"=1'-0"	Released for Fabrication: 8
	Of: 11



Precast Side Wall 2

SCALE: 1/2"=1'-0"

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Drawn By: Steve P McShane Scale:		Checked By: Released for Fabrication:	
Drawing: Precast Side Wall 2		Sheet: 9 Of: 11	



SCALE: $\frac{3}{8}$ "=1'-0"

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Project: Picnic Shelter		Revised: A	
Contractor: M.T. FWP		A	
Drawing:		A	
Precast Roof		Sheet: 11	
Drawn By: Steve P McShane		Checked By:	
Scale:		Released for Fabrication:	